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Amendment Under 37 C.F.R. §1.312

Applicant(s): Hatim M. CARIM et al.

Serial No.: 10/623,359

Confirmation No.: 5048

Filed: 18 July 2003

For: BIOMEDICAL ELECTRODE WITH CURRENT SPREADING LAYER

Amendments to the Specification

Please delete the paragraph beginning at page 6, line 31.

~~FIG. 2A is a plan view of a patterned current spreading layer that may be used in connection with the present invention.~~

Please replace the paragraph beginning at page 11, line 14, with the following amended paragraph.

In some embodiments, the current spreading layer 60 may be provided as a continuous layer that covers all of the upper surface 60 may be provided as a continuous layer that covers all of the upper surface 24 of conductive polymeric sheet 20 (with the exception of pinholes and other minor manufacturing defects that may occur in any process). Alternatively, the current spreading layer 60 may be provided as a patterned current spreading layer 60a as depicted in FIG. 2A.

Please replace the paragraph beginning at page 11, line 19, with the following amended paragraph.

The patterned current spreading layer includes voids [[68a]] in which the upper surface of any conductive polymeric sheet is free of the current spreading layer [[60a]], with those voids [[68a]] typically being larger and/or more numerous than any naturally occurring manufacturing defects such as pinholes. Furthermore, the outer perimeter [[66a]] of any patterned current spreading layer [[60a]] may be coextensive with the underlying conductive polymeric sheet or it may be located inward of the perimeter of the conductive polymeric sheet such that the upper surface of the conductive polymeric sheet forms a frame around the current spreading layer [[60a]] that is free of the current spreading layer [[60a]].

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Please replace the paragraph beginning at page 11, line 27, with the following amended paragraph.

~~The pattern depicted in FIG. 2A is only one example of the many~~ Many patterns ~~[[that]]~~ may be suitable for use in connection with the current spreading layer in biomedical electrodes of the present invention. Also, although the ~~depicted~~ pattern ~~[[is]]~~ may be a regular, repeating pattern, the patterns used may be irregular, random, or contain any desired variations, e.g., less density towards the outer edges of the conductive polymeric sheet.